



New Technologies for the Developing World



Source: WHO/TBP/DAVENPORT

"There are only two possible responses to suffering on this scale. We can turn our eyes away in resignation and despair, or we can take decisive, historic action to turn the tide against this disease and give the hope of life to millions who need our help now. The United States of America chooses the path of action and the path of hope."

President George W. Bush, April 29, 2003

President George W. Bush's Emergency Plan for AIDS Relief is the largest commitment ever by any nation toward an international health initiative dedicated to a single disease. The Emergency Plan is a five-year, \$15 billion, multifaceted approach to combating HIV/AIDS in more than 120 countries around the world.

Each day in 2004, 14,000 people were infected with HIV. To stem the rising tide of HIV infections worldwide, prevention must remain a key priority, despite the promise of expanded access to HIV treatment.

As a key implementing partner of the Emergency Plan, the U.S. Agency for International Development (USAID) not only implements prevention, care, and treatment interventions, but also supports the development of new technologies such as vaccines and microbicides to prevent transmission of HIV in developing countries.

Vaccines

A safe and effective HIV vaccine could help to reverse the tide of the epidemic. USAID's extensive field presence and experience in international development place it in a unique position to inform and advocate for vaccine strategies that are appropriate for the developing country context.

Since 2001, USAID has funded the International AIDS Vaccine Initiative (IAVI). USAID's financial support for IAVI has grown in recent years and is nearly \$27 million in fiscal year 2005. USAID support accelerates the development of new vaccine candidates and technologies and helps link vaccine designers with manufacturers and developing-country sites suitable for testing promising vaccine candidates. Through IAVI, USAID supports all phases of HIV vaccine development as well as policy analysis and other work to pave the way for introducing a vaccine once it becomes available. USAID is also working with IAVI to explore how capacity-building by IAVI for preparation of clinical trial sites in developing countries can be leveraged to support the rollout of HIV/AIDS prevention, care, and treatment. Conversely, new HIV/AIDS treatment programs can be beneficial for large-scale vaccine trials.



Source: BASIC

USAID seeks to focus research and development on safe, effective, and acceptable vaccines and microbicides that have the appropriate cost and product characteristics for use in developing country public sector programs. With its extensive experience in distribution, logistics management, service delivery, provider training, and social marketing, USAID will be well-positioned to collaborate with host governments and indigenous groups to introduce these new prevention

technologies and support their appropriate use in developing countries, once the products

Engaging industry is essential to accelerating the search for a vaccine, since most vaccine product development expertise resides in biopharmaceutical companies. IAVI has a track record of bold innovation in forming partnerships with the biopharmaceutical industry, and USAID is proud to support several of these partnerships.

As a member of the Partnership for AIDS Vaccine Evaluation, USAID collaborates with U.S. governmental partners, including the National Institutes for Health and the Centers for Disease Control and Prevention, to advance the development of a safe and effective HIV vaccine. USAID also supports the idea of the Global HIV/AIDS Vaccine Enterprise and looks forward to contributing its developing country expertise to this valuable endeavor as it unfolds.

Microbicides

Women and girls make up a growing proportion of those infected by HIV/AIDS. In 2004, the United Nations estimated that in sub-Saharan Africa, young women aged 15 to 24 were three times more likely to be infected than young men of the same age. Emerging technologies and research must address the specific needs of women. With funding from the Emergency Plan, USAID is supporting the development of female-controlled chemical barriers known as microbicides. Microbicides could be especially useful for HIV-discordant couples.

For more than a decade, USAID has been essential in shaping the strategic direction of research in this field and leveraging and coordinating the intellectual, proprietary, and financial capital of a host of contributors. Financial commitment for microbicide research and development through USAID has increased significantly in recent years and is nearly \$30 million in fiscal year 2005. The initiation of large-scale clinical efficacy trials for USAID-sponsored microbicide candidates confirms the success of this effort. Since 2004, in collaboration with other agencies and donors, USAID has supported the testing of Carraguard TM, Cellulose Sulfate, and Savvy TM brand microbicides as required for international phase III studies. These will be the first trials in humans to evaluate the effectiveness of this new prevention technology and will have a critical role in demonstrating that a microbicide can make a significant contribution to preventing HIV infection. USAID has also collaborated with other government agencies to develop the U.S. Government's Strategic Plan for Microbicides.

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